

This listing of the claims replaces any and all prior versions and listings of claims in the application:

**LISTING OF THE CLAIMS**

1 (Currently amended): A slider assembly comprising a plurality of sliders arranged in an array and bonded by a debondable solid encapsulant, wherein the encapsulant is comprised of low viscosity styrene and acrylate polymers polymeric materials to minimize gaps between sliders, each slider has a surface that is free from the encapsulant, and the encapsulant-free surfaces are substantially coplanar to each other.

2 (Original): The slider assembly of claim 1, having a contiguous planar surface comprised of at least one encapsulant region and containing the coplanar slider surfaces.

3 (Cancelled).

4 (Currently amended): The slider assembly of claim 2 3, wherein the array is a rectilinear array.

5 (Original): The slider assembly of claim 4, wherein the sliders do not contact each other.

6 (Original): The slider assembly of claim 4, wherein the substantially coplanar surfaces of the sliders are each an air-bearing surface.

7 (Original): The slider assembly of claim 6, further comprising a substrate in contact with the air-bearing surfaces.

8 (Original): The slider assembly of claim 7, wherein the substrate is comprised of a laminate of a flexible tape and an adhesive, wherein the adhesive is in contact with the air-bearing surfaces.

9 (Original): The slider assembly of claim 8, wherein the adhesive is a pressure sensitive adhesive.

10 (Original): The slider assembly of claim 8, wherein the adhesive preferentially adheres to the tape over the air-bearing surfaces.

11 (Original): The slider assembly of claim 4, wherein the encapsulant does not substantially outgas under vacuum.

12 (Original): The slider assembly of claim 4, further comprising a carrier attached to the encapsulant and/or at least one slider, wherein the carrier does not cover any of the coplanar slider surfaces.

13 (Original): The slider assembly of claim 6, further comprising a resist layer on the air-bearing surfaces, wherein the encapsulant is mechanically stable upon exposure to the resist layer or any component thereof.

14 (Original): The slider assembly of claim 13, wherein the encapsulant is subject to solvation by a solvent not found in the resist layer.

15 (Original): The slider assembly of claim 16, wherein the solvent is comprised of a nonpolar solvent.

16 (Original): The slider assembly of claim 4, wherein the styrene polymer is a hydrogenated styrene copolymer.

17 (Original): The slider assembly of claim 16, wherein the acrylate polymer is prepared via *in situ* polymerization of acrylate monomers.

18 (Original): The slider assembly of claim 17, wherein the acrylate polymer is prepared via photoinitiated polymerization of acrylate monomers.

19 (Original): The slider assembly of claim 16, wherein the hydrogenated styrene copolymer has a softening temperature of about 70°C to about 150°C.

20 (Original): The slider assembly of claim 19, wherein the softening temperature is at least about 130°C.

21 (Withdrawn): A method for forming a slider assembly, comprising:

- (a) arranging a plurality of sliders each having a surface such that the surfaces are coplanar to each other;
- (b) dispensing an encapsulation fluid comprised of a styrene polymer and an acrylate composition in a manner effective to bond the sliders without contacting the coplanar slider surfaces; and
- (c) subjecting the dispensed encapsulation fluid to conditions effective for the fluid to form a debondable solid encapsulant comprising styrene and acrylate polymers.

22 (Withdrawn): The method of claim 21, wherein step (a) comprises placing the sliders on a laminate of a tape and an adhesive such that slider surfaces contact the adhesive.

23 (Withdrawn): The method of claim 22, wherein the adhesive is resistant or impervious to solvation by the encapsulation fluid.

24 (Withdrawn): The method of claim 21, wherein the encapsulation fluid is comprised of styrene polymers dissolved in the acrylate composition.

25 (Withdrawn): The method of claim 24, wherein the acrylate composition is comprised of an acrylate monomer.

26 (Withdrawn): The method of claim 25, wherein the acrylate monomer is isobornyl acrylate.

27 (Withdrawn): The method of claim 24, wherein the acrylate composition is comprised of a polyfunctional acrylate crosslinker.

28 (Withdrawn): The method of claim 21, wherein the encapsulation fluid is free from any solvent requiring removal in step (c).

29 (Withdrawn): A method for forming a slider assembly, comprising:

- (a) arranging a plurality of sliders each having a surface such that the surfaces are substantially coplanar to each other;
- (b) dispensing an encapsulation fluid comprised of a first polymer and a composition that is polymerizable and/or crosslinkable in a manner effective to bond the sliders without contacting the coplanar slider surfaces; and
- (c) subjecting the dispensed encapsulation fluid to conditions effective for the fluid to form a debondable solid encapsulant comprising the first polymer and a second polymer prepared via polymerization and/or crosslinking of the composition.

30 (Withdrawn): The method of claim 29, wherein the first polymer is a styrene polymer.

31 (Withdrawn): The method of claim 29, wherein the second polymer is an acrylate polymer.

32 (Withdrawn): A method for patterning an air-bearing surface of a slider, comprising:

- (a) applying a resist layer on an air-bearing surface of a slider, wherein at least a portion of the slider other than the air-bearing surface is encapsulated in a debondable solid encapsulant comprising styrene and acrylate polymers;
- (b) removing a portion of the resist composition to uncover a portion of the air-bearing surface in a patternwise manner; and
- (c) adding material to and/or removing material from the uncovered portion of the air-bearing surface, thereby patterning the air-bearing surface of the slider,  
wherein the encapsulant is mechanically stable upon exposure to any fluid employed in steps (a), (b), and/or (c).

33 (Withdrawn): The method of claim 32, further comprising, after step (a) and before step (b), exposing the resist layer to photons in the patternwise manner.